



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/696,518	10/25/2000	Olivier Daude	FR9-1999-0110 US1	2590

7590 01/19/2005

BRACEWELL & PATTERSON, L.L.P.
INTELLECTUAL PROPERTY LAW
P.O. BOX 969
AUSTIN,, TX 78767-0969

EXAMINER

LAFORGIA, CHRISTIAN A

ART UNIT PAPER NUMBER

2131

DATE MAILED: 01/19/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/696,518

Applicant(s)

DAUDE ET AL.

Examiner

Christian La Forgia

Art Unit

2131

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 July 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) 2,3,5,11-13,15,16,18,24-26,28,29,31 and 37-39 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-10,14,17,19-23,27,30 and 32-36 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. The amendment filed on 07 July 2004 is noted and made of record.
2. Claims 1-39 have been presented for examination.
3. Claims 2, 3, 5, 11-13, 15, 16, 18, 24-26, 28, 29, 31, and 37-39 have been cancelled as per Applicant's request.

Response to Arguments

4. Applicant's arguments with respect to claims 1, 4, 6-10, 14, 17, 19, 27, 30, and 32-36 have been considered but are moot in view of the new ground(s) of rejection.
5. See further rejections that follow.

Claim Rejections - 35 USC § 103

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.
7. Claims 1, 4, 6-10, 14, 19-23, 27, 30, and 32-36 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent No. 6,424,654 to Daizo, hereinafter Daizo, in view of "Authentication of DHCP Messages" to Droms et al., hereinafter Droms, and in further view of U.S. Patent No. 5,884,024 to Lim et al., hereinafter Lim.
8. As per claims 1, 14 and 27, Daizo teaches a method for preventing unauthorized dynamic host configuration servers from responding to client configuration requests in an Internet Protocol (IP) network, said method comprising the steps of:

broadcasting host configuration requests from a server checker client (Figure 5 [blocks 501, 506]; column 6, lines 50-34);

Art Unit: 2131

receiving configuration offer messages from one or more dynamic host configuration servers, said configuration messages delivered to the server checker client responsive to the broadcast host configuration requests (Figures 5 [blocks 504, 509], 6 [blocks 601]; column 6, lines 26-58).

9. Daizo does not disclose detecting an unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages; and, responsive to said detecting step, unicasting host configuration requests from said server checker client to said unauthorized dynamic configuration server such that said unauthorized dynamic host configuration server is unable to respond to configuration requests from network clients.

10. Droms discloses detecting an unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages (p. 3 – p. 4, “Section 3. Protocol 0” and “Section 4. Protocol 1”).

11. It would have been obvious to one of ordinary skill in the art at the time the invention was made to detect an unauthorized dynamic host configuration server within said IP network in accordance with server identification data within the configuration offer messages, since Droms states on pages 1 and 2 that such a modification would aid in preventing denial of service attack directed toward clients. Droms also states that detecting an unauthorized server would establish a “rogue” server with the intent of providing incorrect configuration information to the client in order to conduct a “man in the middle” attack.

12. Lim teaches that an unauthorized DHCP server can be made unable to respond to requests from network clients by repeatedly obtaining IP leases from the DHCP server (column

Art Unit: 2131

2, lines 38-34). In other words, Lim discloses unicasting host configuration requests from said server checker client to said unauthorized dynamic configuration server such that said unauthorized dynamic host configuration server is unable to respond to configuration requests from network clients.

13. It would have been obvious to one of ordinary skill in the art at the time the invention was made to unicast host configuration requests from said server checker client to said unauthorized dynamic configuration server such that the unauthorized DHCP server is unable to respond to configuration requests from network clients, since Droms states on page 2 that such a modification would prevent a rogue server from establishing itself on the server, thereby preventing denial of service and man in the middle attacks.

14. Regarding claims 4, 17 and 30, Lim teaches said unicasting host configuration requests comprising unicasting a plurality of IP address renewal requests to said unauthorized dynamic host configuration server (column 2, lines 28-34).

15. With regards to claims 6, 19 and 32, Lim teaches wherein each IP address renewal includes a client medium access control (MAC) address that is not included within a range of valid MAC addresses utilized within the IP network (column 6, lines 2-11, column 6, lines 38-44, column 8, lines 18-19).

Art Unit: 2131

16. With regards to claims 7, 20 and 33, Daizo teaches wherein each IP address renewal request includes a client IP address that is not included within a range of valid IP addresses utilized in the IP network (Figure 6 [blocks 603, 604]; column 6, lines 54-63).

17. In regards to claims 8, 21 and 34, Droms discloses wherein said checker client includes a list of authorized dynamic host configuration servers (p. 3 – p. 4, “Section 3. Protocol 0”), and wherein said step of detecting an unauthorized dynamic host configuration server further comprises comparing a server identifier included in each configuration offer message with authorized server identification data (p. 3 – p. 4, “Section 3. Protocol 0”).

18. Droms does not disclose the use of a table to store the token.

19. It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the DHCP server’s tokens in a table, since it has been held in the art that making a change for aesthetic reasons (organizing data in a table) requires only routine skill in the art. See MPEP § 2144.04; see also *In re Seid*, 161 F.2d 229, 231, 73, USPQ, 431, 433 (CCPA 1947).

20. With regards to claims 9, 22 and 35, Droms discloses wherein said comparing a server identifier included in each configuration offer message with authorized server identification data further comprises the retrieving an IP address from each configuration offer message (p. 3 – p. 4, “Section 3. Protocol 0”).

21. Droms does not disclose the use of a table to store the token.

Art Unit: 2131

22. It would have been obvious to one of ordinary skill in the art at the time the invention was made to store the DHCP server's tokens in a table, since it has been held in the art that making a change for aesthetic reasons (organizing data in a table) requires only routine skill in the art. See MPEP § 2144.04; see also *In re Seid*, 161 F.2d 229, 231, 73, USPQ, 431, 433 (CCPA 1947).

23. With regards to claims 10, 23 and 36, Droms teaches wherein said server table includes an IP address for each authorized dynamic host configuration server (p. 3 – p. 4, “Section 3. Protocol 0”). Wherein the token discussed in Droms is interpreted as being an IP address for the server.

Claim Objections

24. Claims 7, 20, and 33 are objected to because of the following informalities:

The claim limitation reads as “a range of valid IP addressed utilized in the IP network.” The Examiner believes this to be a typo and for the sake of examination the Examiner interprets the claim to read as “a range of valid IP addresses utilized in the IP network.”

25. Appropriate correction is required.

Conclusion

26. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

27. The following patents are cited to further show the state of the art with respect to IP management schemes, such as:

Art Unit: 2131

United States Patent No. 6,393,484 to Massarani, which is cited to show controlled access to shared-medium public and semi-public IP networks.

United States Patent No. 6,678,732 to Mouko et al., which is cited to show DHCP server for allocating IP address to a plurality of clients.

United States Patent No. 6,427,170 to Sitaraman et al., which is cited to show integrated IP address management.

28. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

29. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

30. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christian La Forgia whose telephone number is (571) 272-3792.


The examiner can normally be reached on Monday thru Thursday 7-5.

Art Unit: 2131

31. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ayaz Sheikh can be reached on (571) 272-3795. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

32. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Christian LaForgia
Patent Examiner
Art Unit 2131


EMMANUEL L. MOISE
PATENT EXAMINER

clf